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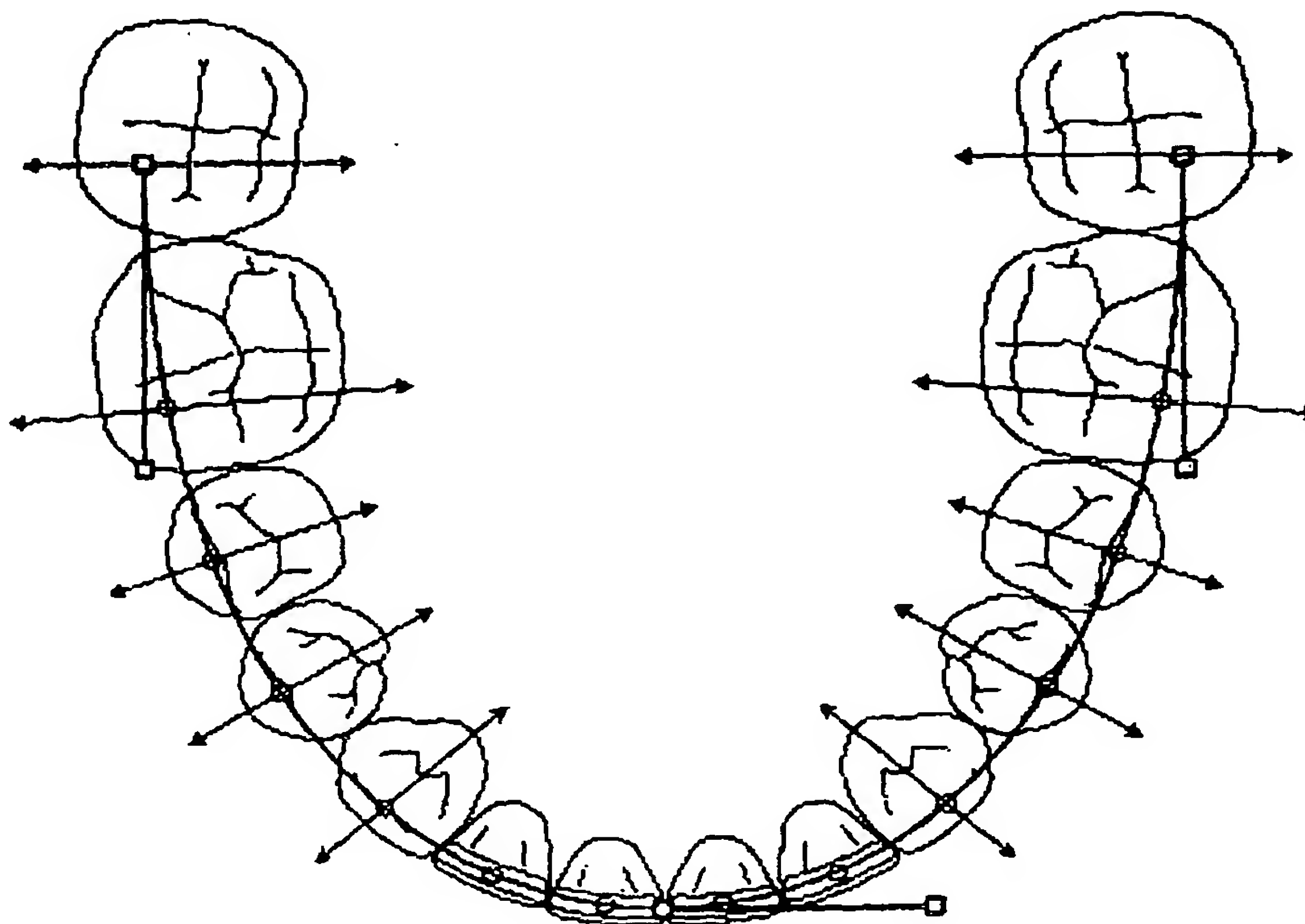
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(54) Title: CUSTOM ORTHODONTIC APPLIANCE SYSTEM AND METHOD



(57) Abstract: Various features are provided for a custom orthodontic appliance manufacturing or designing system. These include features for inputting of data of patient anatomy and practitioner decisions, features for interactively or automatically manipulating data to arrive at appliance characteristics, and features for affecting design or manufacture of the appliance.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/30917

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61C 3/00

US CL : 433/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 433/24

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X — Y	US 5,447,432 A (ANDREIKO ET AL) 05 September 1995, see column 52, lines 6-25 and column 16, lines 44-66.	1, 3, 39-41 ----- 4-6
X,P — Y	US 2003,0027098 A1 (MANEMANN ET AL) 06 February 2003, see paragraph 0076.	10,12 ----- 11
Y	US 6,227,850 B1 (CHISHTI ET AL) 08 May 2001, see column 13, lines 41+.	11
X	US 2002/0072027 A1 (CHISTIE) 13 June 2002, see paragraph 0051.	17
X — Y	US 5,431,562 A (ANDREIKO ET AL) 11 July 1994, see column 14, lines 25-35.	25 ----- 26
X,P	US 6,463,344 B1 (PAVLOSKAIA ET AL) 08 October 2002, see entire document.	30

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"O" document referring to an oral disclosure, use, exhibition or other means

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"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/30917

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claim Nos.: 7 and 8
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
they are dependent claims that do not indicate which claims they are depending from.
3. ☒ Claim Nos.: 13-16
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.